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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/520,927	03/08/2000	Edward J. Cleary JR.	6960 US	1687

7590

01/13/2003

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EXAMINER

YANG, RYAN R

ART UNIT

PAPER NUMBER

2672

DATE MAILED: 01/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/520,927

Applicant(s)

CLEARY ET AL.

Examiner

Ryan R Yang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 7-9 is/are rejected.
- 7) ☒ Claim(s) 3-6 and 10-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. This action is responsive to communications: Amendment, filed on 12/26/02.  
This action is non-final.
2. Claims 1-15 are pending in this application. Claim 1 is independent claims.
3. The present title of the invention is "Surround Sound Display" as filed originally.

***Claim Rejections - 35 USC § 102***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 1, 2 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishikawa et al. (US 4,933,768).

As per claim 1, Ishikawa et al., hereinafter Ishikawa, discloses a surround sound display representing a plurality of sound channels comprising:

a sound stage image (Figure 4);

a correlation meter scale for each sound channel of the sound stage image that has a corresponding sound channel to form a stereo sound source (Figure 4 where the broken line forms the correlation meter scale for the left and right channel); and

markers related to the correlation meter scale that represent the correlation between the corresponding sound channels (Figure 4 where the vertical bars are the markers).

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6. As per claim 2, Ishikawa demonstrated all the elements as applied to the rejection of independent claim 1, supra, and further discloses the sound stage image comprises speaker images positioned at appropriate positions of the display to represent sound sources (Figure 5).

7. As per claim 7, Ishikawa demonstrated all the elements as applied to the rejection of independent claim 1, supra, and further discloses the markers comprise a pointer for each sound channel, the location of the pointer along the correlation meter scale indicating the correlation between the corresponding sound channels (Figure 4 where the edges of the markers are considered the pointer).

8. As per claim 8, Ishikawa demonstrated all the elements as applied to the rejection of dependent claim 7, supra, and further discloses the markers comprises a fill area spanning the correlation meter scales for the stereo corresponding sound channels, the width of the fill area indicating the correlation between the corresponding sound channels (Figure 4 where the markers fill an area and form an width to indicate the correlation between the corresponding sound channels).

9. As per claim 9, Ishikawa demonstrated all the elements as applied to the rejection of dependent claim 8, supra, and further discloses the thickness of the fill area indicates the amplitude of each sound channel (Figure 4 "the volume levels of the respective speakers are expressed by the numbers of thick vertical bars", column 5, line 12-14).

***Allowable Subject Matter***

10. Claims 3-6 and 10-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

11. Applicant's arguments with respect to claims 1-2 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

### ***Inquiries***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ryan Yang** whose telephone number is **(703) 308-6133**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Michael Razavi**, can be reached at **(703) 305-4713**.

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**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

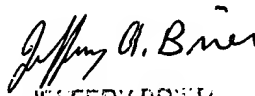
**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 305-47000377.

Ryan Yang  
January 9, 2003

  
JEFFERY BRIEN  
PRIMARY EXAMINER